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OM protein - protein search, using sw model

Run on: June 25, 2003, 11:42:45 ; Search time 41.28 Seconds

(without alignments)
51.648 Million cell updates/sec

Title: US-09-869-540a-2_COPY_4_19

Sequence: 1 MRCMGRVYRRCQV 16

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

A.Geneseq_101002:*

1: /SID52/gcgdata/geneseq/geneseq-emb1/AA1980.DAT:*

2: /SID52/gcgdata/geneseq/geneseq-emb1/AA1981.DAT:*

3: /SID52/gcgdata/geneseq/geneseq-emb1/AA1982.DAT:*

4: /SID52/gcgdata/geneseq/geneseq-emb1/AA1983.DAT:*

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22: /SID52/gcgdata/geneseq/geneseq-emb1/AA2001.DAT:*

23: /SID52/gcgdata/geneseq/geneseq-emb1/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	95	100.0	16	21	AA12782
2	95	100.0	16	23	AA077536
3	95	100.0	17	23	AA077535
4	95	100.0	18	21	AA12780
5	95	100.0	18	23	AA077534
6	95	100.0	19	11	AA07358
7	95	100.0	19	20	AA16571
8	95	100.0	19	21	AA12777
9	95	100.0	19	21	AA90259
10	95	100.0	19	22	AA025615

11	95	100.0	19	22	AA07335
12	95	100.0	19	22	AA06894
13	95	100.0	19	22	AA048153
14	95	100.0	19	22	AA037951
15	95	100.0	19	23	AA077533
16	95	100.0	15	11	AA07350
17	91	95.8	16	21	AA07360
18	90	94.7	15	21	AA12781
19	90	94.7	15	21	AA12783
20	87	91.6	15	23	AA07357
21	86	90.5	19	22	AA07358
22	86	90.5	14	23	AA07358
23	85	89.5	17	4	AA030689
24	84	88.4	19	22	AA07337
25	83	87.4	17	4	AA030438
26	83	87.4	17	5	AA040253
27	82	86.3	17	4	AA030688
28	82	86.3	17	22	AA025616
29	82	86.3	17	22	AA048154
30	81	85.3	13	21	AA07336
31	81	85.3	13	22	AA07336
32	81	85.3	13	23	AA07339
33	75	78.9	16	21	AA012776
34	75	78.9	16	22	AA07334
35	66	69.5	11	22	AA07331
36	66	69.5	11	22	AA07339
37	66	69.5	11	22	AA07340
38	66	69.5	11	22	AA07341
39	66	69.5	11	22	AA07342
40	66	69.5	11	22	AA07343
41	66	69.5	11	22	AA07344
42	66	69.5	11	22	AA07345
43	66	69.5	11	22	AA07346
44	66	69.5	11	22	AA07347
45	66	69.5	11	22	AA07348

ALIGNMENTS

RESULT 1	AA12782	AA12782 standard; peptide: 16 AA.
ID	AA12782	
AC	AA12782	
DT	22-NOV-2000	(first entry)
XX		
DE	Rat MCH ligand peptide SEQ ID NO:21.	
XX		
KW	SIC-1; MHC; melanin concentrating hormone; screening; eating;	
KW	appetite stimulator; appetite regulator; periodic pain; atonic bleeding;	
KW	caesarean section; milk congestion; antioleptic agent; drug;	
KW	foetal asphyxia; cervical rupture; premature birth; uterine rupture;	
KW	Prader-Willi syndrome; anorectic; gynecological; abortifacient;	
XX	antonaemia; anabolic; orphan G protein couple receptor protein.	
OS	Rattus sp.	
XX		
XX		
FT	Key	Location/Qualifiers
XX	Disulfide-bond 4..13	
XX		
XX	WO2000040725-A1.	
XX		
XX	13-JUL-2000.	
XX		
XX	27-DEC-1999;	99NO-JF07336.
XX		
XX	28-DEC-1998;	98UP-0374454.
XX	28-APR-1999;	99UP-0122688.
XX	02-SEP-1999;	99UP-0249300.
XX		
XX	(TAKE) TAKEDA CHEM IND LTD.	

XX	Mori M., Shimomura Y., Takekawa S., Sugo T., Ishibashi Y., Kitada C.
PI	Suzuki N.
XX	WPI: 2000-475832/41.
DR	
XX	
PT	Screening methods for compounds as SLIC-1 (ant)agonists useful in the
PR	treatment of eating disorders and as preventives and remedies for e.g.
XX	atonic bleeding and Prader-Willi syndrome
PS	-
XX	
CC	Claim 12; Page 92; 123pp; Japanese.
XX	
CC	The present invention describes a method for screening components (I) or
CC	their salts that can alter the binding properties of melanin-
CC	concentrating hormone (MCH) or its derivative or salt to SLIC-1 or its
CC	salt. Compounds identified by (I) are useful as SLIC-1 (ant)agonists in
CC	eating disorders and as preventives and remedies for e.g. period pains,
CC	uterine recovery failure, caesarean section, artificial interruption of
CC	pregnancy, galactosiasis, tonic uterine contraction, foetal asphyxia,
CC	rupture of uterus, cervical rupture, premature birth and Prader-Willi
CC	syndrome. The present sequence represents a rat MHC ligand peptide
XX	which is used in the exemplification of the present invention.
SO	
Sequence	16 AA:
Query Match	100.0%; Score 95; DB 21; Length 16;
Best Local Similarity	100.0%; Pred. No. 3,8e-07;
Matches	16; Conservative 0; Mismatches 0; Indels 0; Gaps 0.
OY	1 MLRCMLGRVRYPCMOV 16
DB	1 MLRCMLGRVRYPCMOV 16
RESULT 2	
AAU77536	
ID	AAU77536 standard; Protein; 16 AA.
AC	
XX	AAU77536;
DT	
XX	05-JUN-2002 (first entry)
DE	
XX	Melanin concentrating hormone (MCH) residues 4-19.
KW	G protein-coupled orphan; receptor; SLR; melanin-concentrating hormone;
KW	MCH; Appetite-stimulating agent; obesity; malignant metastasias;
KW	exogenous obesity; hyperinsularar obesity; sexual function disorder;
KW	overpowering intermittent pain; still born; uterus rupture;
KW	premature birth; Prader-Willi syndrome.
XX	
OS	Homo sapiens.
XX	
FH	
FT	Key Location/Qualifiers
FT	Modified-site 1
FT	/label= OTHER
FT	/note= "OTHER= 3-(4-hydroxy-3-(125-iodo)-phenyl]"
FT	Disulfide-bond 4..13 propanoyl"
XX	
PN	NO200203070-A1.
PD	
XX	10-JAN-2002.
PF	
XX	04-JUL-2001; 2001MO-JP05809.
PR	
XX	05-JUL-2000; 2000JP-0208254.
PA	(TAKE) TAKEDA CHEM IND LTD.
XX	
PI	Mori M., Shimomura Y., Harada M., Sugo T., Shintani Y.
XX	WPI: 2002-164552/21.
XX	

PT		Screening for compounds or salts which alter affinity of
PT		melanin-concentrating hormone with its receptor to provide agonists as
PT		appetite-stimulating agents and its antagonist for preventing or
XX		treating obesity; uses a protein or hormone
PS		Disclosure: Page 18; 112pp; Japanese.
CC		The invention describes a method of screening for compounds or their
CC		salts that can change affinity of melanin-concentrating hormone (MCH)
CC		with its G protein-coupled orphan receptor protein, SLT. The screened
CC		MCH receptor agonists are useful as appetite-stimulating agents and its
CC		antagonist for preventing or treating obesity e.g. malignant
CC		mastocytosis, exogenous obesity and hyperinsular obesity, and also
CC		for treating sexual function disorders, overpowering intermittent pains,
CC		still borne, uterus rupture, premature birth and Prader-Willi syndrome.
CC		This sequence represents a segment of the melanin-concentrating hormone
CC		(MCH), described in the invention.
XX		
SQ		Sequence 16 AA:
		Query Match 100.0%; Score 95; DB 23; Length 16;
		Best Local Similarity 100.0%; Pred. No. 3 Be-07;
		Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY		1 MLRMLGRVRRPCMOV 16
DB		1 MLRMLGRVRRPCMOV 16.
RESULT 3		
ID	AAU77535	standard; Protein; 17 AA.
AC	AAU77535;	
XX		
DE	05-JUN-2002	(first entry)
KW	Melanin concentrating hormone (MCH) residues 3-19.	
KX	G protein-coupled orphan; receptor; SLT; melanin-concentrating hormone;	
KW	MCH; appetite-stimulating agent; obesity; malignant mastocytosis;	
KW	exogenous obesity; hyperinsular obesity; sexual function disorder;	
KW	overpowering intermittent pain; still born; uterus rupture;	
KW	Premature birth; Prader-Willi syndrome.	
OS	Homo sapiens.	
PH		
FX	Key	location/Qualifiers
FT	Modified-site	1
FT	/label= OTHER	
FT	/note= "OTHER-3-[4-hydroxy-3-(135-Iodo)-phenyl]"	
FT		propanoyl"
FT	Disulfide-bond	5..14
XX		
PN	WO200203070-A1.	
PD	10-JAN-2002.	
PF	04-JUL-2001; 2001MO-JP05809.	
PR	05-JUL-2000; 2000JP-0208254.	
PA	(TAKE) TAKEDA CHEM IND LTD.	
PI	Mori M., Shimomura Y., Harada M., Sugo T., Shintani Y.;	
PI	WPI: 2002-164552/21.	
DR		
XX		
PT		Screening for compounds or salts which alter affinity of
PT		melanin-concentrating hormone with its receptor to provide agonists as
PT		appetite-stimulating agents and its antagonist for preventing or
PT		treating obesity; uses a protein or hormone -

PS Disclosure; Page 17; 112pp; Japanese.

CC The invention describes a method of screening for compounds or their
CC salts that can change affinity of melanin-concentrating hormone (MCH)
CC with its G protein-coupled orphan receptor protein, SLF. The screened
CC MCH receptor agonists are useful as appetite-stimulating agents and its
CC antagonist for preventing or treating obesity e.g. malignant
CC mastocytosis, exogenous obesity and hyperinsular obesity, and also
CC for treating sexual function disorders, overpowering intermittent pains,
CC still borns, uterus rupture, premature birth and Prader-Willi syndrome.
CC This sequence represents a segment of the melanin-concentrating hormone
CC (MCH), described in the invention.

SO Sequence 17 AA;

Query Match 100.0%; Score 95; DB 23; Length 17;

Best Local Similarity 100.0%; Pred. No. 4e-07;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MRCMLGRVYRPMQV 16

DB 2 MRCMLGRVYRPMQV 17

RESULT 4

AA12780 standard; peptide: 18 AA.

AA12780;

22-NOV-2000 (first entry)

Rat MCH ligand peptide SEQ ID NO:19.

SLC-1; MHC; melanin concentrating hormone; screening; eating;
appetite stimulator; appetite regulator; period pain; atonic bleeding;
caesarean section; milk congestion; antioesic agent; drug;
foetal asphyxia; cervical rupture; premature birth; uterine rupture;
Prader-Willi syndrome; anorectic; gynaecological; abortifacient;
antonaemia; anabolic; orphan G protein-couple receptor protein.

Ratus sp.

Key Location/Qualifiers

Disulfide-bond 6..15

WO20040725-A1.

13-JUL-2000.

27-DEC-1999; 99WO-JP07336.

28-DEC-1998; 98JP-0374454.

28-APR-1999; 99JP-0122688.

02-SEP-1999; 99JP-0249300.

(TAKE) TAKEDA CHEM IND LTD.

Mori M, Shlomura Y, Takekawa S, Sugo T, Ishibashi Y, Kitada C;

Suzuki N;

WPI: 2000-475832/41.

Example 17; Page 117; 123pp; Japanese.

The present invention describes a method for screening components (I) or
their salts that can alter the binding properties of melanin-
concentrating hormone (MCH) or its derivative or salt to SLC-1 or its
salt. Compounds identified by (I) are useful as SLC-1 (ant)agonists in

CC eating disorders and as preventives and remedies for e.g. period pains,
CC uterine recovery failure, caesarean section, artificial interruption of
CC pregnancy, galactostosis, tonic uterine contraction, foetal asphyxia,
CC rupture of uterus, cervical rupture, premature birth and Prader-Willi
CC syndrome. The present sequence represents a rat MCH ligand peptide
CC which is used in the exemplification of the present invention.

SO Sequence 18 AA;

Query Match 100.0%; Score 95; DB 21; Length 18;

Best Local Similarity 100.0%; Pred. No. 4.2e-07;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MRCMLGRVYRPMQV 16

DB 3 MRCMLGRVYRPMQV 18

RESULT 5

AA07534 standard; Protein; 18 AA.

AA07534;

05-JUN-2002 (first entry)

Melanin concentrating hormone (MCH) residues 2-19.

G protein-coupled orphan; receptor; SLF; melanin-concentrating hormone;
MCH; appetite-stimulating agent; obesity; malignant mastocytosis;
exogenous obesity; hyperinsular obesity; sexual function disorder;
overpowering intermittent pain; still born; uterus rupture;
premature birth; Prader-Willi syndrome.

Homo sapiens.

Key Location/Qualifiers

Modified-site 1

/label= OTHER

/note= "OTHER= 3-[4-hydroxy-3-(125-Iodo)-phenyl]

Disulfide-bond 6..15

WO200203070-A1.

10-JAN-2002.

04-JUL-2001; 2001WO-JP05809.

05-JUL-2000; 2000JP-0208254.

(TAKE) TAKEDA CHEM IND LTD.

Mori M, Shlomura Y, Harada M, Sugo T, Shintani Y;

WPI: 2002-164552/21.

Screening for compounds or salts which alter affinity of
melanin-concentrating hormone with its receptor to provide agonists as
appetite-stimulating agents and its antagonist for preventing or
treating obesity, uses a protein or hormone -

Disclosure; Page 17; 112pp; Japanese.

The invention describes a method of screening for compounds or their
salts that can change affinity of melanin-concentrating hormone (MCH)
with its G protein-coupled orphan receptor protein, SLF. The screened
MCH receptor agonists are useful as appetite-stimulating agents and its
antagonist for preventing or treating obesity e.g. malignant
mastocytosis, exogenous obesity and hyperinsular obesity, and also
for treating sexual function disorders, overpowering intermittent pains,
still borns, uterus rupture, premature birth and Prader-Willi syndrome.
This sequence represents a segment of the melanin-concentrating hormone

CC (MCH), described in the invention.
 XX
 AC Sequence 18 AA:
 SQ
 Query Match 100.0%; Score 95; DB 23; Length 18;
 Best Local Similarity 100.0%; Pred. No. 4.2e-07;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 MLCRMIGRYRPCMOV 16
 DB 3 MLCRMIGRYRPCMOV 18
 RESULT 6
 AAR07358 standard; protein; 19 AA.
 XX AAR07358:
 AC AAR07358:
 DT 29-JAN-1991 (first entry)
 XX
 DE Cyclic mammalian melanin-concentrating hormone peptide.
 XX Melanin concentrating hormone; skin disorders; melanomas;
 KW ACH secretion.
 XX
 OS synthetic.
 XX
 FH Key Location/Qualifiers
 FT Disulfide-bond 7..16
 XX
 PN WO9011295-A.
 PD 04-OCT-1990.
 XX
 PF 20-MAR-1990: 90MO-US01492.
 XX
 PR 22-MAR-1989: 89US-0326984.
 XX
 PA (SALK) SALK INST FOR BIOL STUD.
 XX
 PI Vaughan J, Fischer WH, Rivier JE, Nahon JM, Presse FG, Vale WM;
 XX
 DR WPI: 1990-330225/42.
 DR N-PSDB: AAO06238.
 XX
 PT Cyclic mammalian hormone for concentrating mammalian melanin -
 PT comprises peptide based on 19 amino acid residues with cysteine
 PT linkages.
 XX
 PS Claim 2; page 43; 47pp; English.
 XX
 CC This is the sequence of a cyclic mammalian melanin-concentrating
 CC hormone (MCH) peptide. MCH is useful for treating skin disorders,
 CC for suppressing the proliferation of melanoma cells and for
 CC modulating secretion of ACTH. Monoclonal antibodies raised against
 CC this peptide sequence are useful for assaying tumour cells.
 CC See also AAO06239-48.
 CC
 XX
 SQ Sequence 19 AA:
 Query Match 100.0%; Score 95; DB 11; Length 19;
 Best Local Similarity 100.0%; Pred. No. 4.4e-07;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 MLCRMIGRYRPCMOV 16
 DB 4 MLCRMIGRYRPCMOV 19
 RESULT 7
 AAY16571
 ID AAY16571 standard; peptide; 19 AA.

XX
 AC AAY16571:
 DT 10-AUG-1999. (first entry)
 XX
 DE Melanin-concentrating hormone peptide sequence.
 XX
 KW Human 11cb splice variant; antibacterial; gene therapy; vaccine; HIV-1;
 KW HIV-2; pain; cancer; diabetes; obesity; anorexia; bulimia; asthma;
 KW Parkinson's disease; heart failure; hypotension; hypertension;
 KW urinary retention; osteoporosis; angina pectoris; myocardial infarction;
 KW ulcer; allergy; benign prostatic hypertrophy; psychotic disorder;
 KW neurological disorder; anxiety; schizophrenia; manic depression;
 KW delirium; dementia; severe mental retardation; dyslexia;
 KW Huntington's disease; Gilles de la Tourette's syndrome;
 KW bacterial adhesion; Melanin-concentrating hormone.
 XX
 OS Homo sapiens.
 XX
 PN WO928492-A1.
 PD 10-JUN-1999.
 XX
 PF 02-DEC-1998: 98MO-US25497.
 XX
 PR 15-APR-1998: 98US-0060504.
 PR 03-DEC-1997: 97US-0984288.
 PR 05-FEB-1998: 98US-0073747.
 XX
 PA (SMIR) SMITHKLINE BEECHAM CORP.
 XX
 PI Ames RS, Bergsma D, Chambers JK, Ellis CE, Foley JT;
 PI Sarau HM;
 XX
 DR WPI: 1999-371132/31.
 XX
 PT New human 11cb splice variant polypeptide and polynucleotide
 PT
 XX
 PS Example 3; page 45; 56pp; English.
 XX
 CC The present sequence represents melanin-concentrating hormone, which is a
 CC ligand for the human 11cb splice variant polypeptide. 11cb splice variant
 CC polypeptides and polynucleotides are useful for diagnosing diseases due
 CC to an infection of an organism with the 11cb splice variant gene. They
 CC can diagnose the stage and type of infection. 11cb splice variant
 CC polypeptides are also useful for screening for compounds which affect
 CC activity of the protein. These can be used in treatment to inhibit
 CC (antagonist i.e. antibacterial drugs) or enhance (agonist) 11cb splice
 CC variant activity, in addition to direct administration of 11cb splice
 CC variant polypeptides to treat conditions associated with a lack of 11cb
 CC splice variant polypeptide, or direct administration of antisense
 CC sequences to prevent expression. 11cb splice variant polypeptides
 CC (administered directly, in a vector i.e. gene therapy, and as a vaccine)
 CC and antibodies induce an immune response to immunize and prevent disease.
 CC Diseases diagnosed, prevented or treated include HIV-1 or -2 infection;
 CC pain; cancer; diabetes; obesity; feeding and drinking abnormalities
 CC e.g. anorexia, bulimia; asthma; Parkinson's disease; acute and congestive
 CC heart failure; hypotension; hypertension; urinary retention;
 CC osteoporosis; angina pectoris; myocardial infarction; ulcers; allergies;
 CC benign prostatic hypertrophy and psychotic and neurological disorders;
 CC including anxiety, schizophrenia, manic depression, delirium, dementia
 CC or severe mental retardation, and dyslexias, such as Huntington's
 CC disease or Gilles de la Tourette's syndrome. 11cb splice variant
 CC polypeptides, polynucleotides and their (ant)agonists can prevent
 CC adhesion of bacteria to matrix proteins, and are useful for use on
 CC wounds and body implants to prevent bacterial infection.
 CC
 XX
 SQ Sequence 19 AA:
 Query Match 100.0%; Score 95; DB 20; Length 19;
 Best Local Similarity 100.0%; Pred. No. 4.4e-07;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MLRCMLGRVYRPMQOV 16
 DB 4 MLRCMLGRVYRPMQOV 19

RESULT 8

AB12777
 ID AAB12777 standard; peptide; 19 AA.

AC AAB12777;

DT 22-NOV-2000 (first entry)

DE Rat MCH ligand peptide SEQ ID NO:2.

XX SLC-1: MHC; melanin concentrating hormone; screening; eating;
 KM appetite stimulator; appetite regulator; period pain; atonic bleeding;
 KM caesarean section; milk congestion; antileptostic agent; drug;
 KM foetal asphyxia; cervical rupture; premature birth; uterine rupture;
 KM Prader-Willi syndrome; anorectic; gynaecological; abortifacient;
 KM anaemia; anabolic; orphan G protein-couple receptor protein.

OS Rattus sp.

PH Key Location/Qualifiers

FT Disulfide-bond 7..16

PN WO200040725-A1.

PD 13-JUL-2000.

XX 27-DEC-1999; 99MO-JP07336.

XX 28-DEC-1998; 98JP-0374454.

PR 28-APR-1999; 99JP-0122688.

PR 02-SEP-1999; 99JP-0249300.

XX (TAKE) TAKEDA CHEM IND LTD.

PI Mori M, Shimomura Y, Takekawa S, Sugo T, Ishibashi Y, Kitada C;

PI Suzuki N;

DR WPI: 2000-475832/41.

XX Screening methods for compounds as SLC-1 (antagonists useful in the

PT treatment of eating disorders and as preventives and remedies for e.g.

PT atonic bleeding and Prader-Willi syndrome

XX Claim 8; Page 106; 123pp; Japanese.

XX The present invention describes a method for screening components (I) or

CC their salts that can alter the binding properties of melanin-

CC concentrating hormone (MCH) or its derivative or salt to SLC-1 or its

CC salt. Compounds identified by (I) are useful as SLC-1 (antagonists in

CC eating disorders and as preventives and remedies for e.g. period pains,

CC uterine recovery failure, caesarean section, artificial interruption of

CC pregnancy, galactostosis, tonic uterine contraction, foetal asphyxia,

CC rupture of uterus, cervical rupture, premature birth and Prader-Willi

CC syndrome. The present sequence represents a rat MCH ligand peptide

CC which is used in the exemplification of the present invention.

SO Sequence 19 AA;

XX Query Match 100.0%; Score 95; DB 21; Length 19;

XX Best Local Similarity 100.0%; Pred. No. 4,4e-07;

XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MLRCMLGRVYRPMQOV 16

DB 4 MLRCMLGRVYRPMQOV 19

AAV90259
 ID AAV90259 standard; Peptide; 19 AA.

AC AAV90259;

DT 19-SEP-2000 (first entry)

DE Melanin concentrating hormone peptide.

XX Human; ilicby; diagnosis; therapy; infection; cancer; diabetes; obesity;

XX anorexia; bulimia; asthma; Parkinson's disease; congestive heart failure;

XX hypotension; hypertension; urinary retention; osteoporosis; delirium;

XX angina pectoris; myocardial infarction; ulcer; allergy; manic depression;

XX benign prostatic hypertrophy; psychotic disorder; neurological disorder;

XX anxiety; schizophrenia; dementia; severe mental retardation; dyskinesia;

XX Huntington's disease; Gilles de la Tourette's syndrome;

XX genetic counselling; melanin-concentrating hormone.

OS Homo sapiens.

PH WO200037113-A1.

PD 29-JUN-2000.

XX 22-DEC-1999; 99MO-US30622.

XX 22-DEC-1998; 98US-0218467.

XX (SMIK) SMITHKLINE BEECHAM CORP.

PI Sathe G, Ellis CE, Halsey W, Bergsma D;

PI WPI: 2000-452132/39.

DR Novel ilicby polynucleotides for diagnosis, prevention and treatment of

PT cancer, diabetes, psychotic and neurological disorders, microbial

PT infections and for genetic counselling

XX Disclosure; Page 6; 45pp; English.

XX This sequence represents a melanin-concentrating hormone peptide, that

CC is bound by the human ilicby protein of the invention. ilicby

CC polynucleotides are useful as diagnostic reagents for detecting the

CC presence or absence of a variation in a ilicby allele in an individual.

CC Assaying for the presence or absence of a ilicby polynucleotide mutation

CC by isolating DNA from the individual is useful for screening an

CC individual for an increased risk of developing a disease or for

CC diagnosing a disease. ilicby polynucleotides may contain polymorphic

CC markers, and are therefore useful for genetic association

CC studies searching for a disease susceptibility gene and/or therapeutic

CC response gene. Diseases treated include bacterial, fungal, protozoan and

CC viral infections, particularly infection caused by human immunodeficiency

CC virus (HIV)-1 or HIV-2, cancers, diabetes, obesity, feeding and drinking

CC abnormalities, such as anorexia and bulimia, asthma, Parkinson's disease,

CC acute and congestive heart failure, hypotension, hypertension, urinary

CC retention, osteoporosis, angina pectoris, myocardial infarction, ulcers,

CC allergies, benign prostatic hypertrophy, psychotic and neurological

CC disorders, including anxiety, schizophrenia, manic depression, delirium,

CC dementia or severe mental retardation, and dyskinesias, such as

CC Huntington's disease or Gilles de la Tourette's syndrome. The methods for

CC detecting a mutation in the ilicby gene, can therefore be further extended

CC to include genetic counselling for an individual with respect to the

CC individual's potential for developing one of the above diseases.

SO Sequence 19 AA;

XX Query Match 100.0%; Score 95; DB 21; Length 19;

XX Best Local Similarity 100.0%; Pred. No. 4,4e-07;

XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MLRCMLGRVYRPMQOV 16

DB 4 MLRCMLGRVYRPMQOV 19

RESULT 9

RESULT 12
 AAB68894
 ID AAB68894 standard; Peptide: 19 AA.
 XX
 AC AAB68894;
 XX
 DT 24-APR-2001 (first entry)
 XX
 DE Human MMCH.
 XX
 KM Human; MMCH: mammalian melanin-concentrating hormone; AXOR21;
 KM G-protein coupled receptor; anorectic; antidiabetic; cyostatic;
 KM antiaesthetic; antiparkinsonian; cardiac; hypertensive; osteopathic;
 KM antianginal; cerebroprotective; antitumor; antiallergic; antimigraine;
 KM antileptic; tranquilizer; antitumor; gene therapy; vaccine; cancer;
 KM neurological disorder.
 OS Homo sapiens.
 XX
 XX WO200107606-A1.
 XX
 PD 01-FEB-2001.
 XX
 PF 27-JUL-2000; 2000WO-GB02899.
 XX
 PR 27-JUL-1999; 99GB-0017627.
 XX
 PR 24-AUG-1999; 99GB-0020046.
 XX
 PA (SMIK) SMITHKLINE BEECHAM PLC.
 XX
 PI Duckworth DM, Hill J, Muir AI, Szekeres PG;
 XX
 DR WPI; 2001-182790/18.
 XX
 PT Novel G-protein coupled receptor polypeptide, AXOR21, useful for
 PT treating obesity, diabetes, eating disorders such as anorexia and
 PT bulimia, hypertension, osteoporosis, angina pectoris and myocardial
 PT infarction.
 XX
 PS Disclosure; Page 31; 42pp; English.
 XX
 CC The present sequence is mammalian melanin-concentrating hormone (MMCH).
 CC MMCH is a ligand for AXOR21, a G-protein coupled receptor.
 CC AXOR21 polynucleotides and polypeptides are useful for treating and
 CC diagnosing conditions such as pain, cancers, diabetes, obesity, anorexia,
 CC bulimia, asthma, Parkinson's disease, acute heart failure, hypotension,
 CC hypertension, urinary retention, osteoporosis, angina pectoris,
 CC myocardial infarction, stroke, ulcers, allergies, benign prostatic
 CC hyper trophy, migraine, vomiting, psychotic and neurological disorders
 CC including anxiety, schizophrenia, manic depression, depression, delirium,
 CC dementia and severe mental retardation, and dyskinesia such as
 CC Huntington's disease or Gilles de la Tourette's syndrome. AXOR21
 CC polynucleotides and polypeptides are also useful for screening and
 CC structure based designing of antagonists, agonists and inhibitors of
 CC AXOR21. AXOR21 polynucleotides are useful for chromosome localisation
 CC studies, as diagnostic reagents for detecting mutations in associated
 CC genes, and as valuable tools for tissue expression studies. AXOR21
 CC polynucleotides and polypeptides are useful as vaccines.
 XX
 SQ Sequence 19 AA;
 XX
 Query Match 100.0%; Score 95; DB 22; Length 19;
 Best Local Similarity 100.0%; Pred. No. 4.4e-07;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 MLCMGLGRVYRRCQOV 16
 |||||
 DB 4 MLCMGLGRVYRRCQOV 19

RESULT 13
 AAB48153
 ID AAB48153 standard; peptide: 19 AA.
 XX
 AC AAB48153;
 XX
 DT 02-APR-2001 (first entry)
 XX
 DE Rat/human melanin-concentrating hormone (MCH) receptor fragment.
 XX
 KM MCH receptor; melanin-concentrating hormone; anorectic; antifertility;
 KM immunomodulator; antiparkinsonian; nootropic; anticonvulsant; human;
 KM neuroprotective; vasodilator; tranquilizer; antidepressant; neuroleptic;
 KM gynecological; contraceptive; osteopathic; GPR24; SLC-1; rat.
 XX
 OS Homo sapiens.
 OS Rattus norvegicus.
 XX
 XX WO200075166-A1.
 XX
 PD 14-DEC-2000.
 XX
 PF 06-JUN-2000; 2000WO-US15503.
 XX
 PR 08-JUN-1999; 99US-0327807.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Ciavelli O, Saito Y, Notackner H;
 XX
 DR WPI; 2001-050021/06.
 XX
 PT Use of melanin concentrating hormone receptor for identifying MCH
 PT receptor agonist or antagonist, receptor ligand, and an individual
 PT susceptible to the receptor-associated conditions such as memory
 PT disorders.
 XX
 PS Disclosure; Fig 4a; 61pp; English.
 XX
 CC The invention relates to the use of MCH (melanin-concentrating hormone)
 CC receptor for identifying (i) agonist or antagonist of the receptor, (ii)
 CC an MCH receptor ligand, (iii) an individual having or susceptible to MCH
 CC receptor-associated conditions. Human and rat MCH receptor sequences are
 CC provided which can be used in the method of the invention for identifying
 CC disorders of body weight (such as disorders involving increased (obesity)
 CC or decreased body weight (such as under weight or cachexia), mood
 CC (depression, anxiety disorders, psychotic disorders, schizophrenia),
 CC memory and learning (Alzheimer's disease, dementia, etc.), sleep
 CC (insomnia, bedwetting, sleepwalking, sleep apnea, etc.), dopaminergic
 CC system function (such as Parkinson's disease, Huntington's disease),
 CC reproduction (as male or female contraceptives, or male or female sexual
 CC dysfunction, impotence, failure of lactation, infertility, etc.) or
 CC growth (dwarfism or acromegaly) and also disorders of behaviour such as
 CC autistic disorder, Asperger's disorder etc. The agonist or antagonist
 CC compounds can be used therapeutically to prevent or ameliorate these
 CC conditions. Identifying an individual having or susceptible to MCH
 CC receptor associated conditions allows optimal medical care for the
 CC individual, including appropriate genetic counseling and prophylactic and
 CC therapeutic intervention. The present sequence represents a fragment of
 CC the rat/human MCH receptor.
 XX
 SQ Sequence 19 AA;
 XX
 Query Match 100.0%; Score 95; DB 22; Length 19;
 Best Local Similarity 100.0%; Pred. No. 4.4e-07;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 MLCMGLGRVYRRCQOV 16
 |||||
 DB 4 MLCMGLGRVYRRCQOV 19

RESULT 14
 AAB37951
 ID AAB37951 standard; peptide: 19 AA.
 XX

AC AAB37951;
 XX
 DT 08-MAR-2001 (first entry)
 XX
 DE Melanin concentrating hormone (MCH) peptide sequence.
 XX
 KW Somatostatin-like receptor; SLC-1; melanin concentrating hormone; MCH;
 KM obesity; eating disorder.
 XX
 OS Unidentified.
 XX
 PN MO200070347-A1.
 XX
 PD 23-NOV-2000.
 XX
 PF 19-MAY-2000; 2000MO-SE01010.
 XX
 PR 19-MAY-1999; 99US-0134844.
 PR 14-JUN-1999; 99US-0138675.
 PA (ASTR) ASTRAZENCA AB.
 PI Ahmad S, Cao J, Grazzini E, Lembo P, Walker P;
 DR WPI; 2001-025045/03.
 XX
 PT Assaying compounds that bind to somatostatin-like receptor (SLC-1),
 PT useful for treating obesity and eating disorders, comprises incubating
 PT cells expressing SLC-1 genes with melanin concentrating hormones and
 PT the test compound(s) -
 XX
 PS Disclosure; Page 3; 17pp; English.
 XX
 CC This invention relates to assays which can be used to test compounds for
 CC their ability to bind to the somatostatin-like receptor (SLC-1 receptor).
 CC The assay comprises incubating a cell expressing SLC-1 receptor gene with
 CC melanin concentrating hormone (MCH) and the test compound, and
 CC determining the extent to which binding of the MCH is displaced by the
 CC test compound. The method is useful for determining whether a test
 CC compound can be used to modulate the binding of MCH to the SLC-1
 CC receptor. Compounds identified as modulators may be used as therapeutic
 CC agents in treating obesity and eating disorders. This sequence represents
 CC the melanin concentrating hormone (MCH) amino acid sequence.
 CC
 SO Sequence 19 AA:
 Query Match 100.0%; Score 95; DB 22; Length 19;
 Best Local Similarity 100.0%; Pred. No. 4,4e-07;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 MLRCMLGRYRRCMQV 16
 Db 4 MLRCMLGRYRRCMQV 19
 RESULT 15
 AAU77533
 ID AAU77533 standard; Protein; 19 AA.
 XX
 AC AAU77533;
 XX
 DT 05-JUN-2002 (first entry)
 XX
 DE Melanin concentrating hormone (MCH).
 XX
 KW G protein-coupled orphan; receptor; SLR; melanin-concentrating hormone;
 KW MCH; appetite-stimulating agent; obesity; malignant mastocytosis;
 KW exogenous obesity; hyperinsulinar obesity; sexual function disorder;
 KW overpowering intermittent pain; still born; uterus rupture;
 KW premature birth; Prader-Willi syndrome.
 XX
 OS Homo_sapiens.
 XX

EH Key Location/Qualifiers
 FT Modified-site 1
 FT /label= OTHER
 FT /note= "OTHER- 3-[4-hydroxy-3-(125-Iodo)-phenyl]
 FT Disulfide-bond 7..16
 XX
 PN MO200203070-A1.
 XX
 PD 10-JAN-2002.
 XX
 PF 04-JUL-2001; 2001MO-JP05809.
 XX
 PR 05-JUL-2000; 2000JP-0208254.
 XX
 PA (TAKE) TAKEDA CHEM IND LTD.
 XX
 PI Mori M, Shimomura Y, Harada M, Sugo T, Shintani Y;
 DR WPI; 2002-164552/21.
 XX
 PT Screening for compounds or salts which alter affinity of
 PT melanin-concentrating hormone with its receptor to provide agonists as
 PT appetite-stimulating agents and its antagonist for preventing or
 PT treating obesity, uses a protein or hormone -
 XX
 PS Claim 8; Page 17; 112pp; Japanese.
 XX
 CC The invention describes a method of screening for compounds or their
 CC salts that can change affinity of melanin-concentrating hormone (MCH)
 CC with its G protein-coupled orphan receptor protein, SLR. The screened
 CC MCH receptor agonists are useful as appetite-stimulating agents and its
 CC antagonist for preventing or treating obesity e.g. malignant
 CC mastocytosis, exogenous obesity and hyperinsulinar obesity, and also
 CC for treating sexual function disorders, overpowering intermittent pains,
 CC still horns, uterus rupture, premature birth and Prader-Willi syndrome.
 CC This sequence represents the melanin-concentrating hormone (MCH),
 CC described in the invention.
 CC
 SO Sequence 19 AA:
 Query Match 100.0%; Score 95; DB 23; Length 19;
 Best Local Similarity 100.0%; Pred. No. 4,4e-07;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 MLRCMLGRYRRCMQV 16
 Db 4 MLRCMLGRYRRCMQV 19
 Search completed: June 25, 2003, 11:51:51
 Job time : 41.28 secs